

## 13 Tides

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1.

Samantha worked her back muscles, flaring and arching to permit herself more minutes, more hours, before her back gave out. She stooped, folded her soft body, and brought up young clams, tiny and fragile, to feed into the living dock structure in front of her. The structure towered over her, four feet above her head, its struts reaching in all directions. Samantha constructed a new tree of life.

2.

The white layers looked like a wedding cake, up until their pristine flatness was disrupted by extrusions, white fingers reaching outward. The plastic shapes were an homage to local mangrove trees, the inspiration for the artificial mini-reef.

3.

She stooped down again, brought up another handful of tiny sea creatures that she invited to make their home between the sandwiched plastic layers. Other filter feeders would come and join them. Together, they would filter the waters, take the red tide from Samantha's beloved estuary.

That was the theory, anyway. Samantha longed to be part of the reef community. New dock owners and old-timers pooled resources, united against a common enemy. They fought the oxygen-strangler, the tiny bacterium that was killing manatees, dolphins, and fish. One tiny speck had glided into their system on the flows of agricultural run-off.

4.

“Looks like a mess to me.”

The boat had snuck up on her, quiet and speedy, its wake cresting around to pummel her half-submerged calves on the dock.

“Lucky that you are not the invited guest. Looks like a dinner table to most anybody underwater.”

Samantha had no problems speaking back to the boor. She knew that his fishing chest was likely full with silver-gleaming carcasses pulled out of the off-shore sea. The dead zones hadn't yet touched his hunting ground.

"I know where I get my dinner from, and it's not inland polluted. You'd be better off getting sea-worthy."

He wasn't wrong. It needled Samantha. Only high-sea fishing yielded dinner-size food these days. The coasts were hopelessly strangled and devoid of oxygen. Everything stank. Her sculpture wouldn't make much difference.

The man's voice behind her sounded further away now, as he cruised down to his spot.

"Sorry, girl, I know you are trying. But it's too little too late. Come over for dinner tonight."

5.

Would she? Would she need to? Or was there enough cash left in her wallet to get a budget meal at Wendy's? Her fingers shook as she twisted wires together, tucked safely so as to not wound visiting fish.

The evening sun stood low on the ocean's knife-edge, ready to dip quickly beneath, leaving them all in darkness. Samantha stood back, and pressed the button to winch the sculpture down into the sea. It was done. She whispered a little prayer to the tiny shells attached to the core structure: live, eat, multiply!

She turned away. The dark red sun stroked her burning back. Half-way along to her Ford Focus, she halted, and changed direction, toward the BBQ grill at the nearby yacht.

6.

In the waters, shells rustled, clacking against stiff white plastic, driven by new liquid currents. One of the oysters extended a fringed beard into the salty sea. It had never tasted anything like this: a hint of big space, directions of fear and hunger, pearl-thoughts from ancient relatives drifting on hormonal flows. A little algae, active, wriggling, crossed into the forest of fringe. The algae affixed, and shook the gelatinous body of the tiny oyster. A struggle commenced: the dinoflagellate crashed into the filter net, disrupting nerve pathways. It slashed tiny openings into the oyster's body. Neurotoxins threatened to overwhelm the growing mollusk. It in turn tried to sequester the algae, to close the gates. Overnight, its growth stayed nearly stagnant. But the tiny oyster pushed and ate, digested and accumulated. It won. The algae died in its filter arms, its toxic load shuttled aside into a small packet of poison.

7.

When Samantha returned to the dock in mid-morning, her head swam with last night's alcohol. Her belly ached. She did not know that the tiny oyster had doubled in size. But the oyster's immune system was weaker now.

8.

Samantha felt the weakness. She led herself down the dock's ladder, put on her mask and snorkel, and had a quick dip around the newly installed mini-reef. She noted new arrivals: fringe feeders had found the reef already, even after barely twelve hours in the water. A silver flash showed her that the marauders had come, too, to a free dinner hanging in the water. But the interior of the white plastic layers seemed safe enough. Likely there would be a balance between creation and predation. Nothing she could do. She waved in the direction of the silver flash, shoo - a little gesture of help.

9.

The simple hand wave dislodged a spot of bacteria from the small fish as it twisted away from the large human shadow. The spot bloomed like its own parachute, a tiny pinprick flower like the red head of a match. The bacteria drifted. It just missed the white structure, and launched out into the wide unknown far along the tide's path.

Samantha pulled herself up again. Job completed. She dripped her way to her car. She felt nauseous.

10.

A week passed. The oyster grew ferociously, its shell barely dented by the encounter with the poisonous algae. Only a thinner section of its growing shell held the memory of weakness. This sliver of shell lay close to its feeding mouth. The oyster didn't know about the translucency. But the tiny window allowed a glimpse of a muscular contraction every time a ray of sun fell at just the right angle into the sea. A wink of movement. The oyster filtered the water, nutrients and calcium. It trapped microorganisms in its growing filter fingers.

11.

Samantha was in bed. A small organism didn't know its scientific name. *E. coli* O157:H7. It had ridden in on a salad leaf on the BBQ night, alongside fish fillet. In Samantha, the organism found warmth and nourishment.

It had reproduced, latched onto the gentle rings of red blood cells. They died quickly. Their debris, cell corpses, clogged Samantha's kidneys, till her urine dribbled, darker and darker, then ceased. Her cell phone lay untouched next to the stinking toilet.

The BBQ man from the boat, released after a three-day stint in the local hospital, didn't have her number anyway.

Obstructions grew, fluids pressed, till all flows stopped. It ended quickly.

12.

The wedding cake stood tall in the estuary's turbulent water. Some boats still drifted by, screws often tangled in green weeds. Greenness thickened down into the waters. Around the sculpture, pathways of light fringed through the murk. A long-necked bird had fallen in deep lust with the muscular contractions behind the oyster's translucent shell window. The bird dove down many times a day, making paths in the water, lanes of lighted desire. The bird couldn't touch the oyster, shielded deep in its white bridal shroud. But it wouldn't let up, and dove, and dove, its neck, its spine, its limbs between twist and streamline. The oyster took the gift of the sun, and ate. And its brethren ate, held in the light. The red tide ebbed around them all, waiting for the next jolt.

13.

The next wave came with the rains, in the night, in the long time, down the alligator's mouth, in the cow's intestine, beneath the airplane's hatch, between the mangrove's fingers. It came.